

Newcastle Reservoir – Project Update



USGS Study Considerations

- Successfully Decreased thermocline/oxycline
- Storm response in all mercury related parameters
- Fish tissue trends



Alternatives

Option A: Continue with full scope research

Option B: Implement original MOU

Option C: Relocate pump

Option D: Discontinue operation (re-purpose pump)

Preferred Alternative

B→C→D

Potential Relocation Site

- Reservoir Characteristics
 - Known fish tissue advisory
 - Off channel impoundment
 - Hydrology
 - Favorable bathymetry

Future Monitoring – Fish Tissue

- Spring sampling at Newcastle and Upper Enterprise
- 5 to 10 fish per group
- Newcastle Reservoir
 - Wipers <16" or 2.2 pounds
 - Wipers >16" or 2.2 pounds
 - Rainbow trout
 - Smallmouth bass
- Upper Enterprise Reservoir
 - rainbow trout
 - smallmouth bass

Future Monitoring – Lake Profile Monitoring

- Lake profile and chemistry monitoring – June thru September
- Paired inflow monitoring
- Lake elevation
- Thermistor string and pressure transducer
- Pinto Creek flow monitoring.

Future Monitoring – Site Observer

- Monthly site observation
 - Verify pump operation
 - Identify vandalism
 - Clean algae from pump intake
 - Staff gage reading
 - Pinto Creek flow measurement
- Maintenance Contract
 - Routine maintenance by pump manufacturer
 - Troubleshooting

Discussion

